## **REMARKS**

## **General Remarks**

It is noted that the Preliminary Amendment filed on April 21, 2006 does not seem to have been taken into consideration by the Office. Enclosed for consideration by the Office are (I) a copy of the Preliminary Amendment as filed; (II) a copy of the acknowledgement receipt postcard; and (III) a printout of the "transaction history tab" displayed by the USPTO PAIR system. For clarity, it should be understood that the amendments presented herein contain markings that are formatted as if the aforesaid Preliminary Amendment had been entered as filed.

## **Summary of the Amendments**

The present application contains thirty-five 35 claims, numbered 1-24, 27, 30-32 and 34-40.

Claims 28 and 29 have been cancelled.

Claims 25, 26 and 33 were previously cancelled.

Claims 1, 2, 7, 10, 11, 22, 27, 30, 32, 34, 37, 39 and 40 have been amended for clarity.

It is believed that no new matter has been added under the present amendment.

### **Response to Claim Objections**

On page 2 of the Office Action, the Examiner has raised an objection to the dependency of claims 3 and 9. It is submitted that this defect was corrected by way of the aforesaid Preliminary Amendment. The Examiner is therefore respectfully requested to withdraw the objection under 37 CFR 1.75(c).

# Response to Claim Rejections - 35 USC 101

On page 2 of the Office Action, the Examiner has rejected claim 26 under 35 U.S.C. 101. However, claim 26 has been cancelled by way of the aforesaid Preliminary Amendment, thus rendering this rejection moot.

# Response to Claim Rejections - 35 USC 102

On page 3 of the Office Action, the Examiner has rejected claims 1-6, 17-21 and 27 under 35 U.S.C 102(e) as being anticipated by Bernstein et al. (U.S. Patent 6,574,203), hereinafter referred to as "Bernstein". The Applicant respectfully traverses the Examiner's rejection for the reasons set forth herein below.

In particular, it will be noted that claim 1 includes "an input device [...] for receiving a handoff signal", "an output device for delivering the handoff signal", and "a converter [...] for translating the handoff signal".

Firstly, the Examiner does not seem to have accorded sufficient importance to the question of whether Bernstein teaches a "handoff signal". In fact, an inspection of Bernstein, and particularly the passages cited by the Examiner (i.e., col. 2, line 48, and col. 3, lines 2-3 and 20-23), will reveal that Bernstein's handoff results from a decision-making process in the mobile station. In Bernstein, there is no "handoff signal" to be either received, converted or transmitted, much less by a device "for integration into a base station".

Secondly, there is no "converter" in Bernstein for effecting any kind of "translating". The "processor" referred to by the Examiner (citing processor 36 of Bernstein) does not convert a received handoff signal. This is because, quite simply, Bernstein's processor does not receive any handoff signal to begin with. The processor merely implements an algorithm for deciding the appropriate moment at which to effect handoff, based on various parameters. Moreover, Bernstein is completely silent regarding any translation functionality whatsoever being provided between two

modes, and does not provide any indication that any such translation functionality would be useful or desirable.

Thirdly, in claim 1, the handoff signal at the second mode is delivered respective to a second coverage area and indicates to a subscriber station operating in the second mode to switch from the second mode to the first mode. On the other hand, Bernstein discloses a mobile station that implements a process for evaluating a trigger metric at the mobile station. Whatever the outcome of this process, it is certainly NOT the case that the mobile station in Bernstein delivers any signal whatsoever over a coverage area which would indicate to a subscriber station to effect any kind of a switch between modes. Rather, the "if a good frame is received [...], the mobile station in step 66 completes the inter-frequency handoff by sending an HCM, and continues the ongoing call on the new frequency." Thus, in Bernstein, the switch is effected under the control of the mobile station and not the base station.

Fourthly, Bernstein describes the structure and operation of the mobile station during handoff – see col. 4, lines 54-55 and col. 6, lines 19-22 in particular. It would be false to contend that Bernstein is directed to "a device for integration into a base station" (to use the language of claim 1). Although the Examiner's immediate reaction may be that claim 1 as examined did not include this particular wording of the preamble, the Applicant remarks that similar language *did* appear in former claim 6, which was originally rejected by the Examiner on the same grounds as claim 1. Thus, it should be apparent that the flaws in Examiner's rejection of former claim 6 carry over to current claim 1.

In view of the foregoing, it should be apparent that Bernstein fails to teach or suggest all of the limitations of claim 1, therefore precluding a finding of anticipation under 35 USC 102.

Notwithstanding the above, perhaps the most striking proof of novelty vis-à-vis Bernstein is the fact that the Examiner's selective construction of the terms in claim 1 leads to a contradiction of Bernstein's own teachings. Specifically, the Examiner has construed the claimed first mode as Bernstein's "current frequency" and the claimed

second mode as Bernstein's "new frequency". Now, in its final clause, claim 1 states that the handoff signal indicates to a subscriber station to switch from the second mode to the first mode. According to the Examiner's construction, and if Bernstein were an anticipatory reference, this would mean that a subscriber station in Bernstein is instructed to switch from the new frequency (i.e., second mode) to the current frequency (i.e., first mode), which is of course the *opposite* of what is happening in Bernstein! It follows that Bernstein cannot be interpreted in such a way as to constitute an anticipatory reference.

At this point it may be beneficial for the Applicant to re-introduce a **non-limiting** example based on the specification in order to clarify just how different the present invention is from Bernstein. It should be appreciated that the sole purpose of the example below is to illustrate usage of the terms "first" and "second" in claim 1 in a practical context. The scope of the claims is not to be interpreted by the below paragraph, and it is respectfully submitted that any arguments required to establish novelty of claim 1 vis-à-vis Bernstein can be drawn from the already presented paragraphs above.

To take a non-limiting example, therefore, consider that a first base station (38 in Fig. 1 of the present application) operates in the "first mode", which in an example is a "new" frequency F2. Consider that a second base station (34 in Fig. 1 of the present application) operates in the "second mode", which in an example is an "old" frequency F1. Consider now that a subscriber station communicating with the second base station 34 over F1 needs to be handed off to the first base station because it is moving towards the first base station but is still within a coverage area common to the two base stations. The first base station would like to send it a "handoff signal" in order to effect the handoff. However, the first base station operates at F2, while the subscriber station, it will be recalled, is communicating with the second base station 34 over F1. So, in order to instruct the subscriber station in the desired fashion, the first base station 38 takes the handoff signal, which it would ordinarily generate at F2, and supplies it to a device (see 58 in Figs. 2 and 3 of the present application). The device receives the handoff signal (at F2), converts it to F1 and delivers it out over the coverage area of the first base station 38. The handoff signal, which has been

converted to F1, is received by the subscriber station because the latter is within the coverage area of the first base station. Meanwhile, the subscriber station is also within the coverage area of the second base station 34, with which it has continued to communicate over F1.

As can be appreciated, the handoff signal converted to F1 has effectively "infiltrated" communications between the subscriber station and the second base station 34 (which have been occurring at F1). Consequently, the subscriber station can be caused to operate at the new frequency (e.g., F2 in the above example) by sending to it a handoff signal, but without requiring the subscriber station to tune to that new frequency in order to receive the handoff signal in the first place. This is unlike Bernstein, where a mobile station "tunes to a new frequency in order to explore a potential handoff opportunity" (col. 6, lines 44-46). Moreover, in the present invention, handoff is triggered by the base station to which communication is being handed off. This is unlike Bernstein, where it is the mobile station that provides the decision making and the base stations are merely informed of the mobile station's decision. The two processes for effecting handoff are completely different.

In conclusion, based on the many reasons presented above, including a non-limiting example for illustration, it should be clear that claim 1 is not anticipated by Bernstein. The Examiner is therefore respectfully requested to withdraw the rejection under 35 USC 102 of claim 1.

Similar arguments apply to claims 17 and 27, which contain language similar to that of claim 1. The Examiner is therefore respectfully requested to withdraw the rejection under 35 USC 102 of claims 17 and 27.

Regarding dependent claims 2-6 and 18-21, each of these claims is dependent on one of claims 1 and 17, and therefore incorporate by reference all of the limitations of the respective base claim. As such, the arguments that apply to claims 1 and 17 also apply to claims 2-6 and 18-21, and the Examiner is therefore respectfully requested to withdraw the rejection under 35 USC 102 of claims 2-6 and 18-21.

# Response to Claim Rejections - 35 USC 103

#### I- Claims 7, 8, 22, 23, 28, 29 and 34

On page 7 of the Office Action, the Examiner has rejected claims 7, 8, 22, 23, 28, 29 and 34 under 35 U.S.C 103 as being unpatentable over by Bernstein et al. (U.S. Patent 6,574,203), hereinafter referred to as "Bernstein", in view of Chang et al. (U.S. Patent 6,621,811), hereinafter referred to as "Chang". Claims 28 and 29 have been cancelled, thus rendering the Examiner's rejection moot. Regarding claims 7, 8, 22, 23 and 34, the Applicant respectfully traverses the Examiner's rejection for the reasons set forth herein below.

Each of claims 7, 8, 22 and 23 is dependent on either claim 1 or 17, and therefore incorporates by reference all of the limitations of the respective base claim. As shown above, there are several features of independent claims 1 and 17 that are not taught by Bernstein. These include (I) the handoff signal; (II) the converter for effecting conversion of a handoff signal; (III) the signal being delivered over a coverage area to indicate to a subscriber station to switch modes; and (IV) actions being performed by devices for integration with a base station. It is respectfully submitted that Chang does not remedy the above noted deficiencies of Bernstein. Rather, Chang is merely concerned with the production of pilot beacon signals with different carrier frequencies. As such, the combination of Bernstein and Chang still fails to teach or suggest all of the claimed limitations, which therefore precludes a finding of obviousness. The Examiner is therefore respectfully requested to withdraw the rejection under 35 USC 103 of claims 7, 8, 22 and 23.

Regarding claim 34, it will be noted that many of the elements of claim 1 that establish novelty over Bernstein are present in some form in claim 34. Specifically, claim 34 recites a CDMA re-direction signal (absent from Bernstein). Also, claim 34 teaches first and second converters for converting the CDMA re-direction signal (absent from Bernstein). Also, claim 34 recites the CDMA re-direction signal being delivered over a coverage area to indicate to a subscriber station to switch frequencies (absent from Bernstein). Finally, claim 34 is directed to a handoff device operable to

be coupled to a radio-transceiver of a base station (whereas Bernstein is exclusively focussed on actions at the mobile station). Moreover, it is respectfully submitted that Chang, due to its limited focus, does <u>not</u> remedy the above noted deficiencies of Bernstein. As such, the combination of Bernstein, Chang and Jonssen still fails to teach or suggest all of the claimed limitations, which therefore precludes a finding of obviousness. The Examiner is therefore respectfully requested to withdraw the rejection under 35 USC 103 of claim 34.

#### II- Claims 9, 10-16, 24 and 25

On page 10 of the Office Action, the Examiner has rejected claims 9, 10-16, 24 and 25 under 35 U.S.C 103 as being unpatentable over by Bernstein et al. (U.S. Patent 6,574,203), hereinafter referred to as "Bernstein", in view of Chang et al. (U.S. Patent 6,621,811), hereinafter referred to as "Chang", and Jonssen et. Al. (U.S. Patent 5,513,246), hereinafter referred to as Jonssen. Claim 25 has been cancelled, thus rendering the Examiner's rejection moot. Regarding claims 9, 10-16 and 24, the Applicant respectfully traverses the Examiner's rejection for the reasons set forth herein below.

Each of claims 9 and 24 is dependent on either claim 1 or 17, and therefore incorporates by reference all of the limitations of the respective base claim. As shown above, there are several features of claim 1 that are not taught by the combination of Bernstein and Chang. These include (I) the handoff signal; (II) the converter for effecting conversion of a handoff signal; (III) the signal being delivered over a coverage area to indicate to a subscriber station to switch modes; and (IV) actions being performed by devices for integration with a base station. Moreover, it is respectfully submitted that Jonssen does <u>not</u> remedy the above noted deficiencies of Bernstein and Chang. Rather, Jonssen is merely concerned with identifying the location of a mobile station with respect to cell boundaries. As such, the combination of Bernstein, Chang and Jonssen still fails to teach or suggest all of the claimed limitations, which therefore precludes a finding of obviousness. The Examiner is therefore respectfully requested to withdraw the rejection under 35 USC 103 of claims 7, 8, 22 and 23.

Regarding claim 10, this claim contains language similar to that of claim 1. Non-obviousness of claim 1 vis-à-vis the combination of Bernstein and Chang has already been discussed above in the section entitled "I - claims 7, 8, 22, 23, 28, 29 and 34". In addition, it is respectfully submitted that Jonssen, due to its limited focus, does <u>not</u> remedy the above noted deficiencies of Bernstein and Chang. Thus, the Examiner is therefore respectfully requested to withdraw the rejection under 35 USC 103 of claim 10.

Regarding dependent claims 11-16, these claims are dependent on claim 10, and therefore incorporate by reference all of the limitations of the base claim. As such, the arguments that apply to claim 10 also apply to claims 11-16, and the Examiner is therefore respectfully requested to withdraw the rejection under 35 USC 103 of claims 11-16.

#### III- Claims 30-33

On page 11 of the Office Action, the Examiner has rejected claims 30-33 under 35 U.S.C 103 as being unpatentable over by Bernstein et al. (U.S. Patent 6,574,203), hereinafter referred to as "Bernstein", in view of Schwartz (U.S. Patent 6,556,551), hereinafter referred to as "Schwartz". Claim 33 has been cancelled, thus rendering the Examiner's rejection moot. Regarding claims 30-32, the Applicant respectfully traverses the Examiner's rejection for the reasons set forth herein below.

Regarding claim 30, this claim contains language similar to that of claim 1. As shown above, there are several features of independent claims 1 and 17 that are not taught by Bernstein. These include (I) the handoff signal; (II) the converter for effecting conversion of a handoff signal; (III) the signal being delivered over a coverage area to indicate to a subscriber station to switch modes; and (IV) actions being performed by devices for integration with a base station. It is respectfully submitted that Schwartz does <u>not</u> remedy the above noted deficiencies of Bernstein. Rather, Schwartz is merely concerned with a multi-frequency pilot beacon adapted to a CDMA system. As such, the combination of Bernstein and Schwartz still fails to teach or suggest all of the claimed limitations, which therefore precludes a finding of obviousness. The

Examiner is therefore respectfully requested to withdraw the rejection under 35 USC 103 of claim 30.

Regarding dependent claims 31 and 32, these claims are dependent on claim 30, and therefore incorporate by reference all of the limitations of the base claim. As such, the arguments that apply to claim 30 also apply to claims 31 and 32, and the Examiner is therefore respectfully requested to withdraw the rejection under 35 USC 103 of claims 31 and 32.

### **CONCLUSION**

In view of the foregoing, Applicant is of the view that claims 1-24, 27, 30-32 and 34-40 are in allowable form. Favourable reconsideration is requested. Early allowance of the Application is earnestly solicited.

If the application is not considered to be in full condition for allowance, for any reason, the Applicant respectfully requests the constructive assistance and suggestions of the Examiner in drafting one or more acceptable claims pursuant to MPEP 707.07(j) or in making constructive suggestions pursuant to MPEP 706.03 so that the application can be placed in allowable condition as soon as possible and without the need for further proceedings.

Date: September 14, 2007

Respectfully submitted,

pplicants Reg. No. 52,535

**SMART & BIGGAR** 1000 De La Gauchetière Street West **Suite 3300** Montreal, Quebec H3B 4W5 **CANADA** 

Telephone:

(514) 954-1500

Facsimile:

(514) 954-1396